AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A radio-resource management method comprising:

~~a control step of, based on~~ a management server receiving radio-link quality information ~~to be notified~~ from at least one of a plurality of radio base stations and radio terminals belonging to respective different operators~~,~~; and

the management server taking alteration control of a frequency that [[said]]one radio base station of said at least one of a plurality of radio base stations utilizes on the basis of information received from ~~relating to~~ other radio base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

2. (Previously Presented) The radio-resource management method according to claim 1, said radio-resource management method characterized in that said radio-link quality information includes at least a received level of a radio link and a quantity of interference with a neighboring radio system, and that said control step has a step of, in the event that a total of the received levels of other base stations utilizing a frequency identical to the frequency that said radio base station currently utilizes is larger than a total of the received levels of other base stations in the frequency other than the frequency that is currently utilized, out of the frequency that said radio base station can utilize, taking control so as to make an alteration to the frequency other than said frequency that is currently utilized.

3. (Original) The radio-resource management method according to claim 1, wherein said radio-link quality information is notified at a predetermined notification period.

4. (Original) The radio-resource management method according to claim 3, wherein, in the event that a link quality of the radio link exceeded a predetermined threshold, said notification period is set to be longer than it is set in the event that it is equal to or less than said threshold.

5. (Original) The radio-resource management method according to claim 3, wherein, in the event that a distribution value of the link quality of the radio link measured within a constant period exceeded a predetermined threshold, said notification period is set to be longer than it is set in the event that it is equal to or less than said threshold.

6. – 18. (Canceled)

19. (Currently Amended) A radio-resource management method comprising:

a management server receiving ~~control step of, based on~~ radio-link quality information ~~to be notified~~ from at least one of a plurality of radio base stations and radio terminals belonging to respective different operators[[,]];

detecting an interference state between the operators to take fault-notification control according to this detected result[[,]]; and,

the management server taking alteration control of a frequency that [[said]]one radio base station of said plurality of radio base stations utilizes on the basis of information received from ~~relating to~~ other base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

20. (Original) The radio-resource management method according to claim 19, said radio-resource management method characterized in that said control step has a step of, in the event that radio interference having a pre-specified value or more from the other radio operator was detected within a network of a certain radio operator, making fault notification to a network management server of the radio operator that is an interference source.

21. (Original) The radio-resource management method according to claim 20, wherein said control step has a step of, in addition to said fault notification, making notification of anyone of an interference quantity, a transmitted-power quantity that the radio base station should attenuate, and a frequency that the radio base station should alter, or a combination thereof as well.

22. (Original) The radio-resource management method according to claim 19, wherein said radio-link quality information is notified at a predetermined notification period.

23. (Original) The radio-resource management method according to claim 22, wherein, in the event that a link quality of the radio link exceeded a predetermined threshold, said notification period is set to be longer than it is set in the event that it is equal to or less than said threshold.

24. (Original) The radio-resource management method according to claim 22, wherein, in the event that a distribution value of the link quality of the radio link measured within a constant period exceeded a predetermined threshold, said notification period is set to be longer than it is set in the event that it is equal to or less than said threshold.

25. (Currently Amended) A radio-resource management apparatus comprising:

a management server configured to receive ~~controller for, based on~~ radio-link quality information ~~to be notified~~ from at least one of a plurality of radio base stations and radio terminals belonging to respective different operators[[,]];

wherein the management server is configured to take ~~taking~~ alteration control of a frequency that [[said]]one radio base station in said plurality of radio base station utilizes on the basis of information received from ~~relating to~~ other base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

26. (Currently Amended) The radio-resource management apparatus according to claim 25, said radio-resource management apparatus characterized in that said radio-link quality information includes at least a received level of a radio link and a quantity of interference with a neighboring radio system, and that said management server ~~controller~~ has means for, in the event that a total of the received levels of other base stations utilizing a frequency identical to the frequency that said radio base station currently utilizes is larger than a total of the received levels of other base stations in the frequency other than the frequency that is currently utilized out of

the frequencies that said radio base station can utilize, taking control so as to make an alteration to the frequency other than said frequency that is currently utilized.

27. – 33. (Canceled)

34. (Currently Amended) A radio-resource management apparatus comprising:

a management server configured to receive ~~controller for, based on~~ radio-link quality information ~~to be notified~~ from at least one of a plurality of radio base stations and radio terminals belonging to respective different operators, detect ~~detecting~~ an interference state between the operators to take fault-notification control according to this detected result, and, take ~~taking~~ alteration control of a frequency that [[said]]one radio base station in said plurality of radio base stations utilizes on the basis of information received from ~~relating to~~ other base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

35. (Currently Amended) The radio-resource management apparatus according to claim 34, wherein said ~~controller~~ management server has means for, in the event that radio interference having a pre-specified value or more from the other radio operator was detected within a network of a certain radio operator, making fault notification to a network management server of the radio operator that is an interference source.

36. (Currently Amended) The radio-resource management apparatus according to claim 35, wherein said management server ~~controller~~ has means for, in addition to said fault notification, notifying anyone of an interference quantity, a transmitted-power quantity that the radio base station should attenuate, and a frequency that the radio base station should alter, or a combination thereof as well.

37. (Currently Amended) A radio base station in a wireless network system including a radio-resource management apparatus for managing a radio resource, and radio base stations belonging to a plurality of respective different radio operators, said radio base station comprising:

means for measuring a quality of a radio link and notifying radio-link quality information that is this measured result to said radio-resource management apparatus; and

means for, in reply to alteration-control notification of a frequency based on said measured result from said radio-resource management apparatus, taking alteration control of a service frequency on the basis of information relating to other base stations belonging to different operators that use the [[same]] frequency used by said radio base station.

38. (Original) The radio base station according to claim 37, wherein said means for notifying comprises means for notification makes notification at a predetermined notification period.

39. (Original) The radio base station according to claim 38, wherein, in the event that the radio-link quality exceeded a predetermined threshold, said notification period is set to be longer than it is set in the event that it is equal to or less than said threshold.

40. (Original) The radio base station according to claim 38, wherein, in the event that a distribution value of the radio-link quality measured within a constant period exceeded a predetermined threshold, said notification period is set to be longer than it is set in the event that it is equal to or less than said threshold.

41. – 56. (Canceled)

57. (Currently Amended) A computer-readable medium storing a program for causing a computer to execute a control operation of a radio-resource management apparatus in a wireless network system, said program characterized in including a frequency control step of, based on radio-link quality information received ~~to be notified~~ from at least one of radio base stations and radio terminals belonging to respective different operators, taking alteration control of a frequency that [[said]]one radio base station utilizes on the basis of information relating to other base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

58. – 59. (Canceled)

60. (Currently Amended) A computer-readable medium storing a program for causing a computer to execute a control operation of a radio-resource management apparatus in a wireless network system, said program characterized in including a step of, based on radio-link quality information to be notified from at least one of radio base stations and radio terminals belonging to respective different operators, notifying ~~anyone~~ one of the radio base stations of an occurrence of a fault and an interference quantity, a transmitted-power quantity that the one radio base station should attenuate, and a frequency that the one radio base station should alter, or a combination thereof to a network management server of the radio operator that is an interference source in the event that radio interference having a pre-specified value or more from the other radio operator was detected within a network of a certain radio operator, and, taking alteration control of a frequency that said one radio base station utilizes on the basis of information relating to other base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

61. (Currently Amended) A computer-readable medium storing a program for causing a computer to execute a control operation of [[a]]one radio base station in a wireless network system including a radio-resource management apparatus for managing a radio resource, and radio base stations belonging to a plurality of respective different radio operators, said program characterized in including the steps of: measuring a quality of a radio link to notify radio-link quality information that is this measured result to said radio-resource management apparatus; and in reply to alteration-control notification of a frequency based on said measured result from said radio-resource management apparatus, taking alteration control of a service frequency on the basis of information relating to other base stations belonging to different operators that use the [[same]] frequency used by said one radio base station.

62. – 76. (Canceled)